

1.	School	<b>Public health institute</b>
2.	Department	
3.	Program title (Arabic)	برنامج المعالجة التنفسية
4.	Program title (English)	<b>Higher Diploma in respiratory therapy</b>
5.	Track	

**First: General Rules & Conditions:**

1. This plan conforms to the valid regulations of the programs of graduate studies.

**2. Specialties of Admission:**

Bachelor's degree in physical therapy, respiratory therapy, nurses, medicine, anaesthesia, biology, medical and biological laboratories medical technology, emergency medical technician (paramedics) and applied medical sciences related to respiratory care from the University of Jordan or any University recognized by the Ministry of Higher Education and Scientific Research.

**Second: Special Conditions:** none.

**Third: Study Plan: Studying (30) Credit Hours as follows:**

**1. Obligatory Courses (26) Credit Hours:**

Course No.	Course Title	Credit Hrs	Theory	lab	clinic
4101501	Respiratory Care Therapeutics	3	2	1	
4101502	Mechanical Ventilation	3	2	1	
4101503	Blood Gases	2	1	1	
4101504	Clinical Practice I	2			2
4101505	Neonatal & Paediatric RC	2	1	1	
4101506	Clinical practice II	2	-	-	2
0503705	Clinical Pharmacology	3	3		
4101702	Introduction to healthcare management	3	3		
4101507	Pulmonary assessment	2	1	1	
4101508	Pulmonary rehabilitation	2	1	1	
4101509	Cardiopulmonary Intensive Care	2	1	1	

## 2. Elective courses: Studying (4) Credit hours from the following:

Course No.	Course Title	Credit Hrs	Theory	Lab	
4101510	Respiratory pharmacology	2	2		
4101511	Respiratory anatomy and physiology	2	2		
4101512	Patient Assessment	2	1	1	
4101513	Professional Ethics in Respiratory Care	2	2		

### Teaching faculty from college of medicine

1. Respiratory disease (taught completely by college of medicine with respiratory care course coordinator).
2. Respiratory physiology (50% of the course taught by college of medicine with respiratory care course coordinator, the other half of the course will be taught by respiratory care lecturer).
3. Health information system (taught completely by college of medicine).
4. Research methodology (taught completely by college of medicine).
5. Management of health care organization (taught completely by college of medicine).
6. Neonatal & Paediatric RC (50% of the course taught by college of medicine with respiratory care course coordinator, the other half of the course will be taught by respiratory care lecturer)
7. Fundamentals of Polysomnography (50% of the course taught by college of medicine with respiratory care course coordinator, the other half of the course will be taught by respiratory care lecturer)
8. Cardiopulmonary Intensive Care (50% of the course taught by college of medicine with respiratory care course coordinator, the other half of the course will be taught by respiratory care lecturer)

## Course Description

<b>Course:</b>	<b>Respiratory Care Therapeutics (3 credit hours)</b>
<b>Course Description</b>	This course provides core knowledge of Respiratory diseases and essential respiratory care procedures such bronchial hygiene therapy, aerosol therapy, airway management, manual/gas-powered resuscitators; oxygen therapy, humidity, medical gases, and oxygen analysers.
<b>Course:</b>	<b>Mechanical Ventilation (3 credit hours)</b>
<b>Course Description</b>	This course provides core knowledge and skills necessary for the initiation, application, and monitoring of mechanical ventilation; advanced concepts of mechanical ventilation will be introduced to manage patients with variety of cardiopulmonary disorders. Topics such as: Modes of mechanical ventilation, Waveform analysis, Management of MV, Pharmacology for MV, Weaning from MV, Home MV, advanced ventilator modes. Nutritional considerations for MV and use of special techniques in mechanical ventilation will be also discussed in details with applied cases.
<b>Course:</b>	<b>Blood Gases (2 credit hours)</b>
<b>Course Description</b>	This course will give the students an introduction about respiratory system anatomy and physiology and learn how to make an arterial puncture, heel sticks and sampling from arterial line then analyze and interpret the results of the sample and relate it to the physiological and clinical condition of the patient. Also, in this course the students will learn how to make the calibration and quality control of Automated Blood Gas Machine. In addition non invasive monitor and Sampling Errors, Blood Gas Electrodes and Quality Assurance will be introduced.
<b>Course:</b>	<b>Clinical Practice I (2 credit hours)</b>
<b>Course Description</b>	Clinical Practice Course I is designed for the students in which they will be exposed to the hospital environment and experience contact with other health care professionals and ancillary personnel. During this course, they will be participating with various respiratory care procedures involving from initial patient assessment up to the application of the required therapy which have been covered in previous courses. Student will be monitored and supervised and evaluated by clinical instructor.
<b>Course:</b>	<b>Neonatal &amp; Pediatric RC (2 credit hours)</b>
<b>Course Description</b>	This course is designed to cover major aspects of neonatal and pediatric respiratory care. The course involves the study of topics about fetal lung development, fetal circulation, cardiopulmonary transition at birth, neonatal and pediatric resuscitation, neonatal and pediatric assessment, respiratory care procedures, common respiratory diseases in neonates and pediatrics and their proper management.
<b>Course:</b>	<b>Clinical Practice II (2 credit hours)</b>
<b>Course Description</b>	Clinical Practice II provides a challenging new phase to clinical practice as the students will be having the opportunity to experience critical care management. The advanced respiratory care procedures requires the student to develop further their critical thinking skills as well as prepare them mentally, psychologically and emotionally to provide respiratory care to critically ill patients in need of mechanical ventilation and other advanced cardiopulmonary life support within the scope of respiratory care. It also provides experience on the basic and advanced cardiopulmonary function testing.

<b>Course:</b>	<b>Clinical Pharmacology ( 3 credit hours)</b>
<b>Course Description</b>	The course deals with the use of drugs in humans. It includes a brief description of the pathophysiological processes, diagnosis and treatment of common medical problems. The mechanism of action, pharmacological effects, clinical uses, adverse effects and drug interactions will be discussed. In addition, the course will briefly discuss preclinical and clinical trials and the ethics of conducting such studies.

<b>Course:</b>	<b>Introduction to healthcare management ( 3 credit hours)</b>
<b>Course Description</b>	This course provides an introduction to the theoretical basis of health care management. It contextualizes management within the health care system and provides an introduction to the management functions, managers roles and skills. It describes the managerial processes, and interaction between organizations and their environment. The course provides an opportunity to examine real life management case studies in order to apply management practice and skills in real life situations.

<b>Course:</b>	<b>Pulmonary assessment (2 credit hours)</b>
<b>Course Description</b>	This course provides an overview of basic spirometry and advanced Pulmonary function testing. Criteria for judging the acceptability and reproducibility of test data are provided. Bronchodilator and challenge test studies presented. Advanced indirect test measurement will be covered. current knowledge of sleep medicine, sleep disorders, and event recording during sleep will be elaborated on. Students will be introduced to the fundamental procedures of recording events during sleep. Common sleep-related respiratory disorders will also be discussed.

<b>Course:</b>	<b>Pulmonary Rehabilitation (2 credit hours)</b>
<b>Course Description</b>	This course is designed to provide students with comprehensive information on the structure of pulmonary rehabilitation program and the role of the respiratory care practitioner in this program. This course provides information about the pharmacological and nutritional profile of chronic pulmonary disorders, smoking cessation program, travel with pulmonary disorders, health education, therapeutic respiratory exercise and respiratory home care.

<b>Course:</b>	<b>Cardiopulmonary Intensive Care (2 credit hours)</b>
<b>Course Description</b>	This course provides the students with core knowledge with different essential monitoring and diagnostic techniques and modalities for patients with cardiopulmonary disorders in the intensive care unit (ICU). Students will be able to monitor cardiac function, interpret basic ECG rhythms, know common medications used in ICU, know how to assist bronchoscopy and other critical procedures carried out in the ICU. Students will be able to perform cardiopulmonary assessment, chest x-ray interpretation in the critical care settings, and management of trauma and post-cardiothoracic surgical care.

<b>Course:</b>	<b>Respiratory Pharmacology (2 credit hours)</b>
<b>Course Description</b>	This course aims to provide RC students with the basic principles of pharmacology. This course particularly covers the group of drugs used during diagnostic and therapeutic management of cardiopulmonary diseases. Emphasis is placed on the drug uses, its mode of actions, common indications, method of administration, dose calculations. drug interactions and adverse effects. Those drugs include all types of inhalers such as bronchodilators, mucolytic and anti-inflammatory drugs. In addition, antihistamines, cardiac, immunosuppressant, anesthetic, neuromuscular blockers, and some common antimicrobials.

<b>Course:</b>	<b>Respiratory Anatomy and Physiology (2 credit hours)</b>
<b>Course Description</b>	This course provides core knowledge of the normal structure and function of the respiratory system. Clinical application of common physiological principles will be discussed in this course. The aim of this course is to focus on student's attention in the surface anatomy and functional aspects of the anatomic structures of the thorax. Students will also become acquainted with the physiological aspects of respiration including pulmonary ventilation and circulation, physical principles of gas exchange, transport of gases and regulation of respiration. Students should apply the physiological principles learned in this course to their clinical practice in the hospitals.

<b>Course:</b>	<b>Patient Assessment (2 credit hours)</b>
<b>Course Description</b>	This course provides an introduction to examination skills and techniques used in diagnosis of pulmonary diseases. The course involves study of patient respiratory history, physical examination of the chest, radiological and medical laboratory assessment and documentation of the data in the medical chart.

<b>Course:</b>	<b>Professional ethics in respiratory care (2 credit hours)</b>
<b>Course Description</b>	This course provides students with introductory knowledge about ethical and legal issues in health care. Implications of ethical and moral issues on respiratory care are emphasized in this course. Medical ethics from Islamic perspective and some important Islamic ruling on contemporary medical issues are also covered in this course. The aim is to increase awareness of Respiratory Care students for ethical dilemmas, professional communications, and critical decisions encountered during clinical practice. Students are also expected to analyze ethical issues using ethical principles.